

Abstract Of The Disclosure

A method and apparatus are provided for monitoring the quality of lubricant that is in a gear mechanism or machine that contains effective materials. A sample of the lubricant or of the vapor that escapes from the lubricant is withdrawn from the gear mechanism or machine. The sample is conveyed to an ion mobility spectrometer, where materials present in the vapor phase above the lubricant are analyzed. The change of the content and of the type of the analyzed materials in the sample is utilized as the actual condition for the aging of the lubricant.